

REMARKS

This application has been carefully reviewed in light of the Office Action dated October 17, 2008. Claims 1, 3 to 8, 10 and 11 are pending in the application, with Claims 2, 9 and 12 having been canceled without prejudice or disclaimer of subject matter and without conceding the correctness of the rejection applied against them. Claims 1 and 11 are the independent claims. Reconsideration and further examination are respectfully requested.

Claims 1 to 12 were rejected under 35 U.S.C. § 102(e) over U.S. Patent No. 7,131,124 (Hanyu). In response, Claims 2, 9 and 12 have been cancelled without prejudice or disclaimer of subject matter and without conceding the correctness of the rejection, and part of the subject matter of Claims 2, 9 and 12 has been incorporated into the independent claims. Accordingly, this should be viewed as a traversal of the rejection, and its withdrawal is respectfully requested as explained more fully below.

Independent Claims 1 and 11 generally concern data transfer between a first controller which controls an engine section for forming an image and a second controller which transmits image data to the first controller. The engine section includes a nonvolatile memory which is rewritten by rewrite data transmitted from the second controller.

According to aspects set out in the claims, communication is performed according to an image forming operation mode or a rewrite mode. Specifically, in the image forming mode, the first controller notifies the second controller of a condition change of the engine section by changing a signal level of a report signal line. In the

rewrite mode, the second controller transmits rewrite data to the first controller via a data signal line in accordance with a signal level of the report signal line.

For example, in one example depiction shown in Applicant's Figure 8, a /CCRT signal is used to indicate a state change of the engine section during a normal operation mode. On the other hand, in the rewrite mode, the /CCRT signal is used to indicate when the engine section is ready to receive more data.

By virtue of this arrangement, it is ordinarily possible to more effectively coordinate image forming and rewriting with the engine section. For example, using the report signal line, the first controller can notify the second controller of a particular timing for transmitting rewrite data via the data signal line. Moreover, in other aspects set out in the dependent claims, the first controller can use the timing of changes in the report signal line to notify the second controller of an error in a rewrite operation.

Referring specifically to claim language, independent Claim 1 is directed to a data transfer method between a first controller which controls an engine section for forming an image and a second controller which transmits image data to the first controller. The engine section includes a nonvolatile memory. In an image forming operation mode of forming an image with the engine section, the method includes notifying the second controller of a condition change of the engine section by the first controller by changing a signal level of a report signal line, and transmitting a condition request instruction by the second controller to the first controller via a data signal line, in response to the notification of the condition change. In a rewrite mode of rewriting the nonvolatile memory, the method includes transmitting a rewrite instruction by the second controller to the first controller via the data signal line, transmitting rewrite data to the first controller by the

second controller via the data signal line, in accordance with the signal level of the report signal line changed by the first controller in response to the rewrite instruction, and rewriting the nonvolatile memory of the engine section by the first controller, by the rewrite data transmitted from the second controller.

Independent Claim 11 is directed to an apparatus substantially in accordance with the method of Claim 1.

Hanyu is not seen to disclose or suggest the features set out in the claims, and in particular is not seen to disclose or suggest at least the features of (i) notifying a second controller of a condition change of an engine section by a first controller by changing a signal level of a report signal line in an image forming operation mode, and (ii) transmitting rewrite data by the second controller to the first controller via a data signal line in accordance with a signal level of the report signal line in a rewrite mode.

As understood by Applicant, Hanyu is directed to a system in which programs for executing downloading are stored in a non-rewritable boot area of a rewritable flash EEPROM. Other programs are stored in the remaining areas of the EEPROM. Based on the non-rewritable programs stored in the boot area, downloading of programs for rewrite can be performed even after a power disconnection interrupts a previous rewrite. See Hanyu, Abstract.

Page 7 of the Office Action, in its rejection of now-canceled Claim 9, asserts that Hanyu (Column 8, line 59 to Column 9, line 10 and Column 9, lines 32 to 37) discloses using a control signal that indicates a state change of an engine section. Page 5 of the Office Action, in its rejection of now-canceled Claim 12, asserts that Hanyu (Column 9, lines 3 to 17 and 32 to 37) discloses designating a mode for rewriting the memory of the

engine section, wherein data is transmitted to the engine controller to rewrite the memory in synchronization with a control signal from the engine controller.

However, the cited portions of Hanyu simply disclose that once Hanyu's printer is finished erasing the writable areas of the EEPROM, the printer issues a demand to a host computer for transmission of a new program to be written in the writable areas. See Hanyu, Column 8, line 59 to Column 9, line 37. The cited portions of Hanyu are not seen to disclose or suggest using a report signal line for different purposes in accordance with different modes, much less (i) notifying a second controller of a condition change of an engine section by a first controller by changing a signal level of a report signal line in an image forming operation mode, and (ii) transmitting rewrite data by the second controller to the first controller via a data signal line in accordance with a signal level of the report signal line in a rewrite mode.

Therefore, independent Claims 1 and 11 are believed to be in condition for allowance, and such action is respectfully requested.

The other claims in the application are each dependent from the independent claims discussed above and are believed to be allowable over the applied references for at least the same reasons. Because each dependent claim is deemed to define an additional aspect of the claims, however, the individual consideration of each on its own merits is respectfully requested.

No other matters being raised, it is believed that the entire application is fully in condition for allowance, and such action is courteously solicited.

Applicant's undersigned attorney may be reached in our Costa Mesa, California office at (714) 540-8700. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

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